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NTSB Order No. EA-4242

UNITED STATES OF AMERICA
NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

Adopted by the NATIONAL TRANSPORTATION SAFETY BOARD
at its office in Washington, D.C.
on the 29th day of August, 1994

DAVID R. HINSON, Administrator, Federal Aviation Administration, Complainant, v. LITA DAWN HOWE, Respondent.	)	Docket SE-12305

OPINION AND ORDER

Respondent has appealed from the oral initial decision of Administrative Law Judge William E. Fowler, Jr., issued on August 18, 1993, following a 2-day evidentiary hearing.[1] The law judge affirmed an order of the Administrator, on finding that respondent had violated 14 C.F.R. 91.5(a), 91.22(a)(1), and

[1]The first day of hearing was April 20, 1993. The initial decision, an excerpt from the hearing transcript, is attached.

91.9.[2] The law judge affirmed the Administrator's 100-day proposed suspension. We deny the appeal, but reduce the sanction to a suspension of 60 days.

Respondent was the pilot in command of a Cessna 152 that she was contracted to fly from Columbus, OH, to Islip, NY.[3] Respondent departed Columbus on May 14, 1989, at approximately 11:30 A.M. Eastern Time, on a Visual Flight Rules (VFR) flight to

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[2]§ 91.5(a) (now § 91.103(a)) reads:

> Each pilot in command shall, before beginning a flight, become familiar with all available information concerning that flight. This information must include -
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> (a) For a flight under IFR or a flight not in the vicinity of an airport, weather reports and forecasts, fuel requirements, alternatives available if the planned flight cannot be completed, and any known traffic delays of which the pilot in command has been advised by ATC[.]

§ 91.22(a)(1) (now 91.151(a)(1)) reads:

> (a) No person may begin a flight in an airplane under VFR conditions unless (considering wind and forecast weather conditions) there is enough fuel to fly to the first point of intended landing and, assuming normal cruising speed -
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> (1) During the day, to fly after that for at least 30 minutes [.]

On appeal, respondent suggests that this fuel requirement applies only to a pilot's first intended destination and does not continue to apply if a pilot changes the destination enroute. Respondent's interpretation is supported by no analysis, and produces an impractical, illogical result inimical to safety. Moreover, respondent herself testified to her understanding that she needed fuel to fly to Allentown plus 30 minutes. Tr. at 231.

§ 91.9 (now 91.13 (a)) provided:

> No person may operate an aircraft in a careless or reckless manner so as to endanger the life or property of another.

[3]The record indicates that the engine was to be overhauled at Islip and the aircraft exported.

Harrisburg.[4] The aircraft's fuel tanks were full, based on respondent's visual check. Tr. at 261.[5] Prior to departure, she obtained a weather briefing that indicated marginal VFR to IFR conditions (see, e.g., Tr. at 197 and Exhibits A-21 and 22), and she determined to fly around forecasted storms and clouds. On arriving in the vicinity of Altoona, and after receiving weather information for Allentown, respondent advised air traffic control that she was changing her destination to Allentown.

Approximately 2 hours and 50 minutes after departure from Columbus, the aircraft's engine failed. Respondent transmitted an emergency signal, and glided to a landing in a field a few miles north of Reading and approximately 30 miles short of Allentown. Tr. at 28, 54, 91, and Exhibit A-15 map. She obtained 5 gallons of fuel from a nearby private landing strip and school (Blue Mountain Academy) and continued to Allentown, where she purchased another 20 gallons. An FAA inspector met her there, and after a short while, she continued to Islip. She apparently arrived there without incident.

According to the aircraft manual, this aircraft has 24.5 gallons of usable fuel. Exhibit A-18 performance specifications. At the hearing, the Administrator contended that respondent's

[4]Respondent testified that she originally intended to fly direct to Allentown but calculated that, without favorable winds, the aircraft's range was inadequate to do so. Tr. at 226.

[5]Contrary to the Administrator's suggestion at the hearing, respondent's June 15, 1989 letter to the FAA (see Exhibit R-1) is consistent with her testimony at the hearing (Tr. at 259) that she visually checked the fuel.

engine failed due to fuel exhaustion and that the fuel exhaustion was caused by respondent's lack of proper preflight planning.[6]

Respondent argues, alternatively, that carburetor icing could just as reasonably have been found to have caused the engine failure -- a cause she could not reasonably foresee and for which she should not be held accountable -- and that she properly prepared her flight plan, using data from the aircraft manual. Based on those performance data, she argues, she should have had enough fuel and should not be held accountable for relying on the only information available to her regarding fuel use. We disagree with both challenges to the law judge's decision.

Respondent argues that she was reasonable in her flight planning in assuming fuel use of 6 gallons per hour for a planned 3 hour and 15 minute flight.[7] For a number of reasons, we cannot agree. Respondent's flight distance to Allentown was 370 nautical miles. Exhibit A-15 and respondent's June 15, 1989 letter to the FAA. She was planning to cruise at 99 knots. Simple arithmetic indicates that her no-wind flight plan,

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[6]The Administrator suggested that respondent was in a rush to get the aircraft ferried to Islip and as a result compromised safety.

[7]She testified that she arrived at 6 gph by adding a safety factor to the 5.4 gph figure in the aircraft manual. This 5.4 figure assumes a 100-knot speed, a lean fuel mixture, and 67 percent power. Exhibit A-18, Figure 5-7. Respondent also testified that she calculated her flight plan assuming no wind aloft (even though favorable winds were projected). Tr. at 222. Respondent may not now recreate a flight plan based on the winds she actually encountered. Both § 91.5(a) and § 91.22(a)(1) speak to respondent's actions "before beginning a flight."

discounting any delay in reaching her cruising altitude and any landing delay, would take 3.7 hours (3.66 rounded). If one adds to this the extra 30 minutes required by § 91.22(a)(1), and multiplies by 6 gph, the result is 25.2 gallons, .7 gallons more than the usable fuel in the aircraft.

Moreover, as noted earlier (see footnote 4), respondent had herself concluded that Allentown was beyond the aircraft's range without favorable winds and she had initially planned to fly to Harrisburg. Enroute, she determined to proceed to Allentown, based on her belief that the favorable wind would allow her to reach this more distant point. She failed to consider many other factors affecting the aircraft's range, notably altitude.

The basic performance specifications of the aircraft indicated that the aircraft's range was 350 nautical miles and 3.4 hours, but only under certain conditions, conditions this aircraft on this flight was not going to meet and did not meet. For example, the manual's performance specifications assumes cruising altitude of 8,000 feet. Respondent planned to fly at approximately 5,500 feet (Tr. at 105, 265, 278), thus raising fuel use. Tr. at 134. The manual also assumes that a constant altitude will be maintained, but level VFR flight that day was not possible and even respondent admitted that she changed altitude to avoid weather. The unrebutted record also indicates that the lesser amount of fuel used in descending does not make up for the additional fuel used in ascending. Tr. at 189.[8]

[8]Respondent stated that the changes in altitude did not

Further, to the extent that respondent's direction deviated from her flight plan in order to remain VFR, or she flew above the maximum performance cruising power identified in the manual, additional fuel would have been used.

All these factors should have been known to respondent and most of them are obvious from a study of the aircraft's performance specifications. She was obliged to take them into account in planning her flight. Finally, as noted earlier, respondent knew that the engine was scheduled for overhaul when respondent reached Islip, and the record indicates a resulting reduced fuel efficiency. The conditions in which respondent flew were considerably different from those that form the basis for the manual's performance specifications. In her flight plan, respondent failed to make adjustments to her calculations based on factors she knew she would encounter. In her flight, respondent also failed to make adjustments to her calculations based on factors she actually encountered. Fuel use is not just a function of time and distance, as respondent suggests.

Respondent also proposes that carburetor ice could have been the cause of the engine failure, implicitly suggesting that the Administrator failed to meet his burden of proving fuel mismanagement. Respondent's theory, however, has no support in the record. Had carburetor icing been a problem, respondent

(..continued)
exceed 1,500 feet, but she was also reported by the FAA investigator who met her in Allentown to have said that the aircraft was at 2,000 feet MSL when the engine quit. Exhibit A-17. Tr. at 105.

should have had some indication of engine performance deterioration prior to engine failure. She did not testify to this effect. Moreover, she made no comment to anyone at the time that she considered this a possibility nor does the record show that, on landing in the field, she checked the carburetor. Instead, there is considerable evidence that she believed fuel exhaustion was the cause of the engine failure (Exhibit A-10, A-12, A-13), and that it was, in fact, the cause. Most obviously, the tanks were empty on landing in the field (Tr. at 235-236), and the gauges read empty (Tr. at 236).

As a result of this analysis, we affirm the law judge's findings that respondent violated § 91.22(a)(1) and § 91.9. Respondent did not have enough fuel to reach her Allentown destination and fly after that for at least 30 minutes and she did not exercise the necessary due care in her fuel planning and management. We note that, although the respondent argues that there is no support for a carelessness finding, such a finding is derivative in this case.[9]

Section 91.5(a) requires that respondent be familiar, before flight, with all available information concerning the flight. At the hearing, the Administrator claimed errors in her notes of the weather. Tr. at 132 (her notes on ceiling and visibility indicate better conditions than those reported to

[9]See Administrator v. Pritchett, NTSB Order EA-3271 (1991) at fn. 17, and cases cited there (a violation of an operational regulation is sufficient to support a finding of a "residual" or "derivative" section 91.9 violation).

her). She did not explain those discrepancies, but they are extremely minor. Overall, the weather briefings she sought and obtained were extremely thorough as are her notes, and there is no indication that any errors in transcription affected her planning or flight.[10]

We also are not overwhelmed by the Administrator's suggestion that respondent was not adequately familiar with enroute airports. (The complaint suggests a lack of information concerning alternatives available if the planned flight could not be completed.) Respondent testified to the contrary, and noted that one of the reasons for flying VFR was so that she could keep enroute airports in sight in the event that the weather worsened and she decided to land. Tr. at 212-213. No evidence was offered by the Administrator that, at the time of the engine failure, there was an airport within range but respondent did not know it because she had not adequately familiarized herself.

Vastly more important, in our view, is respondent's failure to be adequately familiar with the performance specifications of the aircraft and what they meant and did not mean. As discussed above, and viewed in the most favorable light, the record supports a conclusion that respondent failed sufficiently to familiarize herself with the manual's performance specifications so that she could make an informed judgment of expected fuel use.

[10]In reply, the Administrator argues that respondent should have known that weather conditions would have increased fuel consumption. We do not disagree, but are not convinced that this translates into a finding that respondent was not adequately familiar with weather conditions.

Had she done so, she should easily have determined that the aircraft's range, under the conditions she flew that day, likely did not encompass a Columbus to Allentown flight.

Respondent, on appeal, contends that a 15-day suspension is appropriate. In his reply, the Administrator implicitly concedes that a 100-day suspension is too severe, and avers that one of 60 days is consistent with precedent. Reply at 24. We agree that 60 days is within the appropriate range, and see no basis to reduce the suspension further. See Administrator v. Funk, 6 NTSB 1016 (1989). We disagree with respondent that this case involves "nothing more than a well-executed forced landing with no damage or injuries." It involves respondent's care in flight planning and her apparent misunderstanding of performance specifications.[11]

[11]And, contrary to respondent's statement, the aircraft was damaged by the emergency landing. Tr. at 81. It was fortuitous that there was no other damage or injury; that is no reason to reduce the sanction.

ACCORDINGLY, IT IS ORDERED THAT:

1. Respondent's appeal is denied; and

2. The 60-day suspension of respondent's commercial pilot certificate shall begin 30 days from the date of service of this order.[12]

HALL, Acting Chairman, LAUBER, HAMMERSCHMIDT and VOGT, Members of the Board, concurred in the above opinion and order.

[12]For the purposes of this order, respondent must physically surrender his certificate to an appropriate representative of the FAA pursuant to FAR § 61.19(f).